DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017972 Address: 333 Burma Road **Date Inspected:** 31-Oct-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr. Xu Tao **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG Segment and Bike Path

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Magnetic Particle Testing (MT) – NWIT Document No's: 007177

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Bike Path. The weld designations reviewed are as follows:

- 1. BK004A1-011-005, 006, 008, 038, 001, 010
- 2. BK004A1-011-004, 013, 014, 015, 028, 029

Magnetic Particle Testing (MT) – NWIT Document No's: 007179

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Steel Barrier. The weld designations reviewed are as follows:

- 1. W5-SB1C-001-040, 095, 082, 127, 128
- 2. W5-SB1D-005-028, 025, 013, 020, 043
- 3. W5-SB3-001-127, 128, 089, 086, 043, 044

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

- 4. W5-SB13-002-088, 129, 130, 072, 038
- 5. W5-SB13-001-086, 089, 055, 038, 040

Magnetic Particle Testing (MT) – NWIT Document No's: 007182

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Bike Path. The weld designations reviewed are as follows:

- 1. GGL-MQ-1840-001, 002, 003, 004
- 2. BK004A1-003- Temp attachment
- 3. BK004A2-003-014, 015, 017, 019, 020

Bay 16

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) welding of weld joint W5-SB2-007-044 ~047 located on OBG steel barrier. ZPMC Welder is identified as 068858. ZPMC Quality Control (QC) is identified as Mr. Ma Qian Li. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

FCAW welding of weld joint W5-SB1-056-063 ~074 located on OBG steel barrier. ZPMC welder is identified as 067572. ZPMC Quality Control (QC) is identified as Mr. Ma Qian Li. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2133.

FCAW welding of weld joint W5-SB1-057-063 ~074 located on OBG steel barrier. ZPMC welder is identified as 067765. ZPMC Quality Control (QC) is identified as Mr. Ma Qian Li. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2133.

Bay 19

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) welding of weld joint BK005A1-001-030 ~ 042 located on clip plate of OBG Bike Path. Welder is identified as 062762. ZPMC Quality Control (QC) is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

FCAW welding of weld joint BK004A1-012-030 ~ 042 located on clip plate of OBG Bike Path. Welder is identified as 062739. ZPMC Quality Control (QC) is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

FCAW welding of weld joint BK004A1-005-030 ~ 042 located on sole plate of OBG of Bike Path. Welder is identified as 062761. ZPMC Quality Control (QC) is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

ZPMC personnel performing heat straightening on bottom cover plate of OBG bike path member identified as BK004A-009-014~021. Distortion appeared to be caused by mishandling of the welding/material. ZPMC Quality Control (QC) inspector identified as Mr. Xu Tao was present to monitor the heat straightening process. The heat straightening appeared to comply with HSR1 (B) number 9501. See the attached pictures.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar, Vibin	Quality Assurance Inspector
Reviewed By:	McClendon, Timothy	QA Reviewer